COTTON CHATS

FROM

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JANUARY 19, 1892. APRIL 19, 1904

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NEW YORK.

COTTON CHATS

By the secretary of the

DRAPER COMPANY,

HOPEDALE, MASS.

No. 13. DECEMBER, 1902.

INDIAN WAGES.

We recently learned from an Indian cotton manufacturer, now in this country, that in India his weavers run two looms each and earn $7.50 per month. This seems a very low price, but as a matter of fact it is $3.25 per loom per month, or $39 per loom per year. There are plenty of Northrop loom mills in the United States where the wages are under $20 per loom per year, although the American weaver may be earning five times as much money. Of course it is probable that Northrop looms may invade India itself and the Coolie may run four, or eight, or sixteen, instead of two common looms. Theoretically, all manufacturing could be done cheaper in such countries as China and India—but practically, the high wage countries hold their own. Yet the only reason they do hold their own is because they take prompt advantage of economical methods and devices. The mills that defer using Northrop looms until India is equipped, will have to face a serious proposition. But why should they wait?

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WILLIAM MOWRY.

Although the writer has endeavored to keep posted on all the history of cotton manufacture from its start, he must confess to have overlooked one historical item of considerable associate importance. In looking up the antecedents of the Draper family recently, I ran across the Mowry genealogy, as the present Drapers come down through a Mowry branch. The work refers to William Mowry, born July 27, 1779, who it seems, was employed by Samuel Slater in his first Pawtucket cotton mill. An extract published originally in the Greenwich (N. Y.) Journal, of November, 1874, seems of considerable interest in this connection on account of the

light it throws on the difficulties attending the early equipment of American cotton mills before American shops had taken up the manufacture of cotton machinery as a distinct line.

"The names of Samuel Slater and William Mowry were among the most distinguished manufacturers and capitalists in this country. It will be remembered that Mr. Mowry was, at an early period, employed by Mr. Slater as an assistant in the manufacture of cotton cloth, at Pawtucket, R. I., where Mr. Slater erected the first valuable machinery, and spun yarn to make the first cotton cloth in America; and by their superintendence and direction, as well as by intense labor, erected the first cotton mill in Rhode Island, which was the first in the land of Pilgrims. And well might they be styled the fathers of American manufactures.

"Mr. Mowry was by nature inclined to be a manufacturer for he could not rest contented without being within hearing of the buzz of the spindles, which was music in his ears, and he continued in the employ of Mr. Slater until he became thoroughly acquainted with the business, when he made a moderate and courteous request to be admitted as a partner in the concern, which proposition was peremptorily rejected as a presumptuous daring on the part of Mr. Mowry, who, preferring to be his own master, and the manufacturer of his own fortune, resigned his subordinate situation, and came on to Greenwich, then called Whipple City, in company with Mr. Job Whipple, who held the control of a fine water power there, and had driven his own team all the way to Rhode Island, in search of some competetent person to join with him in carrying on the manufacturing business, where he had previously erected a flouring mill,—the inhabitants of the village having named it Whipple City, after the erection of the mill, in his honor.

"Mr. Whipple had such implicit confidence in the integrity and ability of Mr. Mowry to erect and carry on successfully a cotton mill, that he proposed to sell him one half his interest in the water power, and join him in erecting a new mill, and agreed to let him have his daughter, Lydia, in the bargain, she being a model housekeeper, adorned with every Christian grace, to render his new home cheerful and happy; he did not hesitate a moment in having the nuptial ceremony performed, thus securing a precious jewel for a companion through life. Mr. Slater,

having been advised through some source that Mr. Mowry was about to erect a cotton mill at Whipple City, addressed a letter to him, offering to admit him as a partner in his manufacturing business upon almost any terms he might suggest, on condition he would abandon the project of erecting a cotton mill at Whipple City. Mr. Slater had evidently become alarmed lest he might lose the monopoly in this country of manufacturing cotton fabrics unless he could by some means persuade Mr. Mowry to abandon his present scheme, and accept his proposition and return to Pawtucket. Mr. Slater had no one to censure but himself, for Mr. Mowry had always acted honorably towards him, but had then too deep an interest at stake with Mr. Whipple to accede to his proposition.

"After the completion of the new mill, and running it successfully during the war with Great Britain, Mr. Mowry conceived the idea that some improvements might be perfected in his machinery by personally visiting some of the cotton mills in England. He made his arrangements accordingly, and repaired to New York, taking with him as traveling companion, Mr. Wild, of Hudson, an ingenious machinist, who could manufacture anything, from a cambric needle to a steam-engine. They embarked on the 9th of July, 1816, on board the packet ship South Carolina, Captain Babcock, bound for Liverpool, where they safely arrived in twenty-three days' passage. They were courteously received, and treated with great attention. But when traveling through the manufacturing districts they met with great difficulty in gaining access to the mills. Their applications for admittance were invariably rejected. They finally resolved to take the hazard of being ejected, by entering one of the large mills without applying for permission. In doing so, they came to a door over which was a written notice, "Positively, no admittance," but notwithstanding, they fearlessly entered the room, where they were delighted at discovering the double speeder in full operation, with every spinner's eye turned upon them; but they were not to be daunted, for they proceeded at once to examine the machine. But when the overseer entered the room, and lost no time in hustling them to the door in double-quick time Mr. Mowry began to despair, but Mr. Wild assured him that he could unmistakably manufacture a similar machine. They returned to London after achieving the chief object of their voyage.

"On their return to the United States, Mr. Wild set his clear brain at work manufacturing the machine, and in due time succeeded in fulfilling his promise, in turning out a perfect double speeder, which Mr. Mowry immediately placed in his mill, and set in successful operation. The people were so elated at this news, that they by acclamation exempted the mill from taxation, and Mr. Mowry from military and jury services. When this news reached England, it aroused the jealous feeling of the manufacturers, whose bitterness of feeling towards us had been engendered by the late war in 1812, and which at that time had scarcely subsided. In their frenzy, they concocted a diabolical scheme to destroy the life of one of our estimable citizens, by means of an infernal machine, which was marked and directed to the person who first introduced the double speeder in America.

"The machine was sent as freight, on board one of our packet ships then lying at the dock in London, bound for New York, where she safely arrived.

"Fortunately, when discharging her cargo, the machine slipped from the car-hook, and fell with a crash upon the wharf, causing it to explode without injury to any person. Thus exploded an infamous plot, designed to assassinate a worthy American citizen.

"Mr. Mowry seldom alluded to the affair, or conversed with his friends upon the subject."

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The tables are now turned, as we have deputations from England coming to inspect the new mechanical wonders in American mills. And it is well to note the uniform courtesy and consideration shown such visitors who are allowed the greatest freedom in their investigations in spite of the fact that they are thus educating themselves to strengthen competition.

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We are now shipping over 2000 Northrop looms per month and melting 125 tons of iron per day in our foundry. This is high-water mark to date.

COTTON CHATS

By the secretary of the

DRAPER COMPANY,

HOPEDALE, MASS.

No. 14. JANUARY, 1903.

"The rapid growth of the Draper Machine Works has attracted workingmen of all races, colors and descriptions to Hopedale. . . . .

"Almost side by side at their work can be seen Horace S. Aldrich, of Mendon, and Michael Maloney, of Hopkinton. Aldrich is a veritable giant, 6 feet 2 inches tall, and weighing 465 pounds. His opposite is 3 feet 11 inches in height, and weighing but 61 pounds. The men are of about the same age, Aldrich being 52 and Maloney 50 years old."

—From Boston Herald, Nov. 23, 1902.

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SPECIAL MODEL LOOM.

The demands of our customers have led us to furnish eight standard loom patterns in the past, and yet each model had to be adapted to various conflicting requirements. Thus

a loom for print cloth had to be made heavy enough for harder weaves and be adapted for multiple harness. We have decided that there is a sufficient field in light and narrow two-harness weaves to warrant the designing of a loom in which no outside consideration shall affect the advantages to be gained by keeping the primal consideration in view.

Thus we have developed a model, after several years of study, that takes up no more floor space than is necessary, that is no heavier than is necessary, and in which the moving parts are not clumsy and power-absorbing. The fatigue of running and handling such a loom must be greatly reduced. We shall utilize several new inventions to reduce shock, jar, smashes, etc., and in view of the light goods to be woven, shall protect against the slightest crack or thin place by several novel mechanisms. Illustrations and circulars will follow later. We are already making trial lots by which to gain the necessary mill experience.

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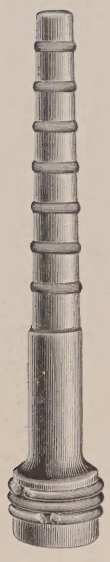
NORTHROP LOOM BOBBINS.



The shape of the ends of the rings on our bobbins caused us more or less annoyance in the earlier years, and led us to make a great many experiments. Some months after a certain mill had endeavored to determine the relative value of various forms, it was proved that the style of ring shown in the cut had given no trouble whatever, so we promptly adopted this pattern. The bobbin itself is of our Feeler type, for use on looms that match the pick.

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INTERESTINGLY IMPROBABLE.

"*The senior class of scholars at the University in Cambridge have unanimously agreed to take their degrees, next Commencement, dressed altogether in the manufactures of this country.*"

Rather than allow this announcement to create much of wonder and discussion, it may be pertinent to explain that it does not refer to a recent occurrence. It is quoted from the Massachusetts Gazette of January 7, 1768,—just one hundred and thirty-five years ago.

THOMAS B. REED.

It is with profound regret that we note the demise of a true friend of American industries. In the December number of the North American Review appears his last contribution to public discussions, and in it are found words so applicable to our own field of effort that we take the liberty of quoting from it:

"*But our problem in this nation is of to-day, and if we do our duty of to-day the nation will find those who can take our places to-morrow. All that is now happening is in accord with the nature of things. Displacing the old with the new is never without its complications and minor evils, which correct themselves in due time. All good progress, even that which is undoubted, has its temporary sorrows. One example, which takes innumerable forms, of this temporary sorrow which may be employed to illustrate the idea, is the invention and use of labor-saving machinery. Upon such invention and use depends the whole material progress of the world. Nothing else could give us the abundance which characterizes our age. Yet, when any new labor-saving invention comes into use the first thing it does is to deserve its name by lessening the number of men who can work. Labor saved is, temporarily, labor lost. Men are discharged; the machine does what they used to do. Do you wonder, then, that men should resent this intrusion upon their sustenance and support? Some are too old to learn new trades, and for them there is no consolation. Yet, in the long run, new occasions spring up which employ this discharged labor, and the world has all it used to have and much beside.*

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FOREIGN COMMENT.

The wide interest in automatic weaving which is now developing in England brings forth very interesting newspaper discussions. Our policy of breaking up second-hand looms replaced by the Northrop, for instance, calls forth the following comment:

"*So what is done by one big firm who make automatic looms, when it gets an order? It takes the ordinary*

looms, which may be quite as good, as part payment for the new. It doesn't use them. It just smashes them into uselessness. That is, on the face of it, the throwing away of thousands of pounds. It is a thing, I fancy, no Englishman would have the courage to do. But look at the longsightedness; it is putting out of the market a huge quantity of looms, and so, partially by inducement, partially by compulsion, forcing on the time when all manufacturers will take to automatic machinery, and then will be the time when the huge harvest will be reaped."

Adverse critics make strong statements to the effect that the Northrop loom can only be run at a maximum speed of 180 revolutions per minute. This is absolute nonsense. We have run single looms on trial as high as 275 picks, to prove that our added motions were not affected by increase of speed. The question of speed is determined by the best average results. Every loom, Northrop or common, will break less warp threads at low relative speed, and require less fixing. The fact that it may be found that a weaver will get more cloth off of a large number of looms with low speed than from a less number at high speed, has nothing to do with the comparative capability of the loom itself to run at high speed.

Another curious contention is the assertion that the Northrop looms require better yarn. Now, with all our experience in American mills, we have **not** found that the grade of cotton used was necessarily changed by the introduction of Northrop looms into mills where they also ran common looms. Here, again, it may be shown that it is **more profitable** to use good cotton and limit yarn breakage; but this by no means proves that the loom itself necessarily **demands** better cotton. A race horse does not **require** better oats in order to beat a plug, but gets them in order to still further outclass the plug. The fact is, that under the English system where a weaver would not try to run more than four common looms, the manufacturer has tried in every way to get value received by keeping that weaver busy on the four looms with replacing small cops and mending in inferior warp, also running the four looms at the highest possible speed.